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EXAMINER
ELALLAM, AHMED

ART UNIT	PAPER NUMBER
2662	

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/370,724	NADER ET AL.	
	Examiner	Art Unit	
	AHMED ELALLAM	2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 June 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This communication is responsive to RCA filed on 6/20/2005.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 2, 4, 9-11, 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Liese et al, US (5,854,889).

Regarding claim 1, with reference to figures 1 and 2, Liese discloses:

- a network under test 20;
- custom servers (ISDN custom server 22, CG custom server, ...) that execute test cases, see column 3, lines 9-28, (Claimed at least one probe network device coupled to the network under test, the at least one probe network device hosting at least one task type);
- Execution server 16 coupled to the custom servers (claimed an NVT server coupled to the at least one probe network device); wherein
- a user at the network under test communicates to a client machine which test or test cases are to be executed by the custom servers, the test or test cases can be edited before transmission to the execution server 16 which coordinates the execution of test cases by the custom servers, see column 3, lines 9-47. Liese further discloses that the client machine 32 includes a GUI (Graphical User Interface) that provides an interface for managing test cases

(e.g. create, change delete, store access...), see column 3, lines 29-47. Liese also discloses that the client machine may access and drive one or more custom servers deployed on a network via an execution server to perform any test capable of being performed on the network. See column 5, lines 55-59. The execution server ensures the user logged into the client machine can access and drive a number of custom servers, column 7, lines 6-9. Liese further discloses supplying the edited test case to the execution server, see column 8, lines 14-18. (Claimed NVT server allows a user to create at least one task for the at least one task type by entering parameters into a template for each of the at least one task, the NVT server is capable of transmitting the at least one task to the at least one probe network device hosting the task type, and the at least one probe network device is capable of executing a process corresponding to the at least one task).

Regarding claim 2, with reference to figure 2, Lies shows a client 32 coupled to the execution server 22, wherein client 32 includes a GUI (Graphical User Interface) that provides an interface for managing test cases (e.g. create, change delete, store access...), see column 3, lines 29-47. Liese further discloses supplying the edited test case to the execution server, see column 8, lines 14-18. (claimed an NVT client coupled to the NVT server, wherein the NVT client provides the template to the user for entering the parameters, and the NVT client is configured to transmit the parameters to the NVT server)

Regarding claim 4, Liese discloses that a custom server is CG server (call generator), see column 3, lines 17-19, column 6, lines 34-35.

Regarding claim 9, with reference to figures 1 and 2, Liese discloses a method for testing a network, comprising:

- providing a test network 20 having custom servers (ISDN custom server 22, CG custom server, ...) that execute test cases, see column 3, lines 9-28, (Claimed providing a test network having at least one probe network device coupled to a network under test, the at least one probe device hosting at least one task type);
- providing an Execution server 16 coupled to the custom servers (probe network device) (claimed providing a NVT server coupled to the at least one probe network device);
- a user at the network under test communicates to a client machine which test or test cases are to be executed by the custom server(s) (claimed executing the task type instructions associated with the at least one task on the at least one probe network device in order to form a process), the test or test cases can be edited (claimed specifying at least one task type) before transmission to the execution server 16 which coordinates the execution of test cases by the custom servers, see column 3, lines 9-47. Liese also discloses that the execution server conveys protocols for successful completion of test request to custom servers that performs the requested tests, see column 4, lines 19-

23. Execution Server 16 probes a test request generated by Client Machine 32 and routes that test request to the appropriate Custom Server(s) which actually performs the requested test case. See column 7, lines 9-12. (Claimed converting the at least one task into instructions executable by the at least one probe network device; and transferring the instructions to at least one probe network device). See column 3, lines 29-47.

- Providing the user with the test results, see column 3, lines 48-63. (Examiner interpreted the provisioning of test results to the user as being the claimed monitoring the test network in order to determine performance).

Regarding claim 10, Liese discloses:

- a client machine 32 (claimed NVT client) coupled to the execution server 16 (claimed coupling an NVT client to the NVT server);
- retrieving test cases by the client machine, See column 3, lines 38-39, (claimed transmitting a collection of templates corresponding to at least one task type to the NVT client);
- managing test cases (templates) (e.g. create, change delete, store access...), see column 3, lines 19-26 and column 3, lines 29-47, (claimed entering parameters into at least one of the collection of templates to form at least one task);
- communicating the test case information to the execution server, see column 3, lines 19-26. (Claimed transmitting the at least one task to the NVT server).

Regarding claim 4, Liese discloses that a custom server is CG server (call generator), see column 3, lines 17-19, column 6, lines 34-35.

Regarding claim 11, Liese discloses that a custom server is CG server (call generator), see column 3, lines 17-19, column 6, lines 34-35.

Regarding claim 17, with reference to figures 1 and 2, Liese discloses: user at the network under test communicates to a client machine which test or test cases are to be executed by custom servers, the test or test cases can be edited before transmission to the execution server 16 which coordinates the execution of test cases by the custom servers, see column 3, lines 9-47. (Claimed forming at least one task, the at least one task being formed by entering task parameters into a task template). Liese further discloses that the client machine 32 includes a GUI (Graphical User Interface) that provides an interface for managing test cases to be executed by the custom servers (e.g. create, change delete, store access...), see column 3, lines 29-47. wherein an Execution Server 16 probes a test request generated by Client Machine 32 and routes that test request to the appropriate Custom Server(s) which actually performs the requested test case. See column 7, lines 9-12. Liese also discloses that the execution server conveys protocols for successful completion of test request to custom servers that performs the requested tests. (Examiner interpreted the feature of routing the text requests generated by the client machine to be executed by the custom server as being the claimed interpreting the task parameters to form executable instructions that can be transmitted to at least one probe network device that hosts a task code, wherein the task code executes the executable instructions).

Regarding claim 18, Liese discloses that a custom server is CG server (call generator), see column 3, lines 17-19, column 6, lines 34-35. (Claimed the at least one task is selected from group consisting of a traffic generator.

Regarding claim 19, with reference to figures 1 and 2, Liese discloses:

a user at the network under test communicates to a client machine which test or test cases are to be executed (claimed sending task templates to a user) by the custom servers, the test or test cases can be edited before transmission to the execution server 16 (claimed receiving tasks formed by the user entering parameters into the task templates) which coordinates the execution of test cases by the custom servers, see column 3, lines 9-47. Liese also discloses that the execution server conveys protocols for successful completion of test request to custom servers that performs the requested tests (claimed translating the task code; and translating the task code to probe network devices). See column 3, lines 29-47, and column 4, lines 19-23. (Examiner interpreted the transmission from the client to the custom server as being the translating the task to task code for transmission).

Regarding claim 20, Liese discloses that a custom server is CG server (call generator), see column 3, lines 17-19, column 6, lines 34-35. (Claimed the task templates corresponding to task type, the task type is a traffic generator).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liese in view of Czarnik et al, US (5,812,529).

Regarding claim 16, Liese discloses substantially all the limitations of parent claim 4, except it doesn't discloses that the client and custom server coupled through the Internet and the templates and at least one task are transmitted using JAVA/HTML.

However, Czarnik in the same field of endeavor discloses an Internet connection between a client and a server, see column 5, lines 23-30. Wherein the templates and a task are transmitted using JAVA, see column 3, lines 33-43. (Examiner interpreted the "missions request" as being the templates and the "mission" as being the task).

Therefore, it would have been obvious to an ordinary person of skill in the art at the time the invention was made to implement the JAVA protocol along the Internet connection as taught by Czarnik in lieu of the client/server architecture of Liese so that Liese testing apparatus/method be adapted to an Internet environment. The advantage would be using the known JAVA browsing in carrying out the testing of Liese by downloading the task cases (templates) and carrying remote testing over the Internet.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Liese.

Regarding claim 3, with reference to figure 2, Liese shows that the execution server is coupled through the bus 12 (claimed Ethernet control network) to the custom servers (claimed at least one probe network device).

Liese doesn't disclose a communication server between the bus (Ethernet control network) and the custom servers (claimed at least one probe network device).

However, Applicant discloses that the communication server couples probes network devices to the control network 12., and that the NVT server is coupled to control network and communicates through communication server to network probes. See specification page 8, lines 11-15. (Examiner interpreted the function of such arrangement (communication server and the NVT server) as being the same function of Liese Execution server, since the execution server couples the bus and the custom servers).

It would have been obvious to an ordinary person of skill in the art at the time the invention was made to make the direct connection of Liese execution server to the custom server through another server (communication server) so that scalability to the number of execution server can be provided if a need arises.

3. Claims 5 and 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Liese in view of Newman, US (5,987,633).

Regarding claim 5 and 12, Liese discloses substantially all the claim limitation of respective parent claims 4 and 11, except it doesn't explicitly disclose that the call generator server (claimed call generator) is compatible with a UDP protocol, serial media and SAP.

However Newman discloses a call generator compatible with a UDP protocol, serial media and SAP. See column 3, lines 29-35, column 19, lines 7-18, and column 27, lines 40-45

Therefore, it would have been obvious to an ordinary skill in the art at the time the invention was made to have the call generator of liese being in conformance with the teaching of Newman. An artisan would be motivated to do so that call generator testing of Liese can be expanded to variety of network configurations. The advantage would be the ability to test different traffic patterns of heterogeneous networks.

4. Claims 6, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liese in view of Biber et al, US (4,951,278).

Regarding claims 6, 13, Kenner discloses substantially all the limitations of claim respective parent claims 4 and 11, except it does not disclose a Logical Link Control (LLC) single protocol session emulator or an SDLC (Synchronous Data Link Control) single protocol session emulator.

However, Biber discloses an LLC and SDLC session emulation, see column 7, lines 60-67 and column 8, lines 1-22.

Therefore, it would have been obvious to an ordinary person of skill in the art at the time of the invention to provide Liese clients with the LLC/or SDLC session emulation taught by Biber so that testing can be implemented on LLC/or SDLC compatible devices.

5. Claims 7, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liese in view of Haeri et al, US (6,385,615).

Regarding claims 7, 14, Kenner discloses substantially all the limitations of claim 7, except it does not disclose an IPX RIP large network emulator.

However, Haeri, with reference to figure 5A, discloses a client 100 comprising an application that has terminal emulation capabilities implemented in an IPX RIP environment. See column 10, lines 5-14, column 17, lines 47-67 and column 18, lines 1-13.

Therefore, it would have been obvious to an ordinary person of skill in the art at the time of the invention to provide Liese clients with the IPX RIP emulation application taught by Haeri so that Kenner testing can be applied to networks using IPX RIP protocol.

6. Claims 8 and 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Liese in view of Culbert, US (5,838,968).

Regarding claims 8 and 15, Liese discloses substantially all the limitations of respective parent claims 4 and 11, except it doesn't explicitly disclose the task case (claimed task type) is a CPU device query.

However, Culbert discloses a CPU device query. See column 8, lines 47-59 and column 11, lines 33-44.

Therefore, it would have been obvious to an ordinary person of skill in the art at the time of the invention to provide the client of Liese with the feature of CPU task

queries so that the custom server of Liese can carry out testing of CPU devices attached to it. The advantage would be monitoring the processing capacity of the CPU devices of network nodes, enabling Liese's system to shape the traffic in accordance with variable traffic load conditions.

Response to Arguments

1. Applicant's arguments with respect to claims 1, 2-9, and 17 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 6/20/2005 have been fully considered but they are not persuasive.

112 2nd Paragraph:

The rejections of claims 1-8 under 112 2nd Paragraph have been withdrawn in light of the Amendment.

Claim 1:

Applicants argue on page 9 that Liese *provide no disclosure of an NVT server allowing a user to enter parameters into a template for each of the at least one task as claimed.* Applicants referred to the final office action page 15 in which Examiner had stated *"the ability of Liese client machine being enabled for a user for managing the test cases using a GUI, ... reads on the claimed NVT apparatus..."* Emphasis added. In response, Examiner notes that Applicants statement is taken out of context, Examiner had provided the argument in relation to the broad meaning of the previously presented claim 1, in which the Examiner stated:

" the Execution server 16 coupled to the custom servers (which read on an NVT server coupled to the at least one probe network device) and that a user at the network under test communicates to a client machine which test or test cases are to be executed, the test or test cases can be edited before transmission to the execution server 16 which coordinates the execution of test cases by the custom servers (claimed probe network device), client machine 32 includes a GUI (Graphical User Interface) that provides an interface for managing test cases (e.g. create, change delete, store access...). ***Therefore, the ability of Liese client machine being enabled for a user for managing the test cases using a GUI, wherein the tests are executed in the customer servers, reads on the claimed NVT apparatus allows a user to create at least one task for the at least one task type by entering parameters into a template for each of the at least one task****" Emphasis added.*

However liese does anticipate claim 1 as amended. Applicant had changed the limitation of "NVT apparatus" to "NVT server", applicant is referred to the rejection above. In addition Examiner notes that while the amendment to claim 1 overcame the rejections under 112 2nd paragraph, it doesn't overcame the teaching of Liese. The claimed "NVT server allows a user to create at least one task..." can be broadly interpreted in many ways that Liese would clearly anticipates. For example Liese with reference to figure 3 discloses a client/server authentication, authentication can be regarded as the claimed feature of enablement, because the server enable the user to provide the test request upon successful the authentication. See column 7, lines 19-23. Stated differently the user is authenticated prior to making any test case requests to the

execution server, and if enabled, then test request can be made. In addition the specification has many embodiments, for example in one embodiment the template is downloaded by the NVT client to the NVT server, and that casts a doubt to whether the claimed "NVT server allows..." refers to this feature or something else. Similarly, the claimed "NVT server allow a user to create at least one task for at least one task type by entering parameters into a template for each of the at least one task" can be interpret as simply the client/server interactions of Liese. Applicants are required to point out where in the specification the newly amended feature of **"NVT server allows a user to create at least one task for at least one task type by entering parameters into a template for each of the at least one task"** is described, otherwise this feature may be considered a new matter that was not described in the specification as originally filed in the next office action.

Claim 9 and 17:

The amendment to claims 9 and 17 necessitated new ground of rejection; in addition Examiner notes that the execution server routes the test case(s) to be executed by the custom servers, each custom sever execute specific test cases, that is to say that each custom server has a specific application software (as indicated by Liese) that handles the test cases transferred by the execution server, bearing in mind that routing test cases from the execution server to specific custom server are subject to OSI layer processing, and hence a conversion is required to transfer test cases, and that reads on the claimed conversion of test case. In addition executable instructions are conveyed since that is required for the execution of test cases by a specific software residing at

the specific custom server (s), the specific software inherently have the specific test case codes for the execution of the specific test case instructions.

Claim 19:

Applicant misinterpreted Examiner rejections of claim 19. As discussed above with reference to claim 1, authentication prior to making test case request (s) is required, See column 7, lines 19-23. The stated "client machine has access to file servers containing test cases and database servers for access to test cases" is preceded by the authentication by the execution server, and therefore and in accordance with client/server paradigm, it is via the execution server that the test cases are transferred to the client machine, therefore the claimed sending task templates to a user is met (by the instruction on the NVT server). The other limitations of claim 19 are clearly met as indicated in the rejections above and the previous discussions with reference to claim 9 and 17.

Claims 2-8:

Applicants argue that since claims 2-8 depends from claim 1 are allowable. Examiner respectfully disagrees for the reasons indicated above with reference to figure1.

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Badger et al, US (6,189,031).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AHMED ELALLAM whose telephone number is (571) 272-3097. The examiner can normally be reached on 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kizou Hassan can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AHMED ELALLAM
Examiner
Art Unit 2662
August 19, 2005

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